

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

What is claimed is:

1-37. (Cancelled)

38. (Currently Amended) A sialite binary wet cement, characterized by that it is composed of a female body as primary component and a male body as secondary component both of which are produced, stored, and transported separately, and are mixed together when they are used, wherein the female body and the male body each have a specific surface area of 2800-7500 cm²/g, the female body is mainly composed of inorganic cementitious materials and water, and it is slurry, paste or wet powder form in a wet state during the whole period of its production, storage, transportation and usage; the male body is mainly composed of inorganic cementitious materials, and it is a wet form ~~or a dry powder form~~;

~~proportion of the two components of the wet cement is that the female body ranges from 20% by weight to 99% by weight, and the male body ranges from 1% by weight to 80% by weight;~~

in the female body, as proportion of its main constituents, CaO ranges from 20% by weight to 55% by weight ~~1% by weight to 60% by weight~~, Al₂O₃ ranges from 1% by weight to 60% by weight, SiO₂ ranges from ~~[[2%]]~~ 50% by weight to 70% by weight, MgO ranges from 1.55 % by weight to 40% by weight, and Fe₂O₃ ranges from 0% by weight to 25% by weight;

in the male body, pH=7-14, and as proportion of its main constituents, CaO ranges from greater than 0% by weight to ~~[[80%]]~~ 40% by weight, SO₃ ranges from greater than 0% by weight to 55% by weight, and R₂O ranges from greater than 0% by weight to 80% by weight, and R is an alkali metal;

the portion of the two components of the wet cement is that the female body ranges from 60% by weight to 99% by weight, and the male body ranges from 1% by weight to 40% by weight,

female body comprises a regulating agent for regulating setting time and working characteristics which is added during production period and/or after production of the female

body,

water content of the female body is from greater than ~~0.1% to 95%~~ 10% to 80% by weight,

the water content of the male body is from 15% to 85% by weight,

the female body is a wet material selected from the group consisting of

a wet material produced by wet-milling one or more selected from the group consisting of amorphous or/and microcrystal iron-making slag, steel slag, blast furnace slag, fly ash, waste glass, phosphorus slag, titanium slag, fluorite slag, burned coal fines slag, and mixtures thereof, as well as water and a regulating agent;

a wet material produced by mixing amorphous or/and microcrystal coal-burning boiler slag together with water and a regulating agent, and then carrying out a wet-milling step;

a wet material produced by taking the amorphous or/and microcrystal vitreous body located in the zone between Portland cement and glass in the $\text{CaO-Al}_2\text{O}_3\text{-SiO}_2$ ternary phase diagram as starting material, and obtaining a microcrystal and/or vitreous substance having potential water-hardening activity through the steps of starting materials selecting, formulating, mix-milling, calcining and melting, then mixing the obtained substance together with water and regulating agents, and carrying out a wet-milling step;

a wet material produced by mixing one or more selected from the group consisting of shale, clay, coal gangue and mixtures thereof calcined and dewatered at 500-1000 degrees centigrade, together with water and regulating agents, then carrying out a wet-milling step;
and

a wet material produced by mixing one or more selected from the group consisting of waste bricks, waste tiles and waste ceramics, and mixtures thereof, together with water and a regulating agent, then carrying out a wet-milling step,

the male body is a wet material produced by mixing one or more selected from the group consisting of natural anhydrite, dihydrate gypsum, hemihydrate gypsum, phosphogypsum, fluorogypsum, salt gypsum, lime, calcium hydroxide, chemical industry lime, cement clinker and mixtures thereof, together with water and a regulating agent.

39. (Previously Presented) The sialite binary wet cement according to claim 38, characterized by that the alkali metal of the male body is K and/or Na.

40. (Canceled)

41. (Previously Presented) The sialite binary wet cement according to claim 38, characterized by that the proportion of the two components of the wet cement is that the female body ranges from 70% by weight to 95% by weight, the male body ranges from 5% by weight to 30% by weight.

42. (Canceled)

43. (Currently Amended) The sialite binary wet cement according to claim 38, characterized by that, in the female body, as the proportion of its main constituents, ~~CaO~~ ranges from 20% by weight to 55% by weight, Al_2O_3 ranges from 2% by weight to 25% by weight, ~~SiO_2~~ ranges from 20% by weight to 50% by weight, MgO ranges from 4 % by weight to 13% by weight, and Fe_2O_3 ranges from 0% by weight to 12% by weight.

44. (Currently Amended) The sialite binary wet cement according to claim 38, characterized by that, in the male body, as the proportion of its main constituents, ~~CaO~~ ranges from greater than 0% by weight to 40% by weight, SO_3 ranges from greater than 0% by weight to 40% by weight, and R_2O ranges from greater than 0% by weight to 20% by weight.

45. (Canceled)

46. (Canceled)

47. (Currently Amended) The sialite binary wet cement according to claim [[46]] 38, characterized by that, the amorphous or/and micro-crystal coal-burning boiler slag is manufactured by adding calcium in the fuel method, wherein the boiler slag is from various industrial boilers which take coal as its fuel, the method comprises the following steps:

adding quick lime, slaked lime and lime stone and mineralizing agents,
melting slags at a high temperature of 1300-1700 degrees Celsius during deslagging process when the slag is inside hearth or is departing from hearth or during the treatment process following after the deslagging step so as to melt partially or entirely the discharged slag, and

then carrying out a rapidly cooling step so as to form amorphous or/and micro-crystal material.

48. (Currently Amended) The sialite binary wet cement according to claim [[46]] 38, characterized by that, the amorphous or/and micro-crystal coal-burning boiler slag is manufactured by adding calcium in the slag method wherein the boiler slag is

from various industrial boilers which take coal as its fuel, the method comprises the following steps:

adding quick lime, slaked lime and lime stone and mineralizing agents into the coal ash slag discharged after being burned,

melting the ash and slag at a high temperature of 1300-1700 degrees Celsius during deslagging process or during the treatment process following after the deslagging step so as to melt partially or entirely the discharged ash slag, and

then carrying out a rapidly cooling step so as to form amorphous or/and micro-crystal material.

49-51. (Canceled)

52. (Previously Presented) The sialite binary wet cement according to claim 38, characterized by that, a part of the starting material of the female body is one or more selected from the group consisting of pozzolana, pearlite, obsidian, pumice, sand stone, quartz sand, mine tailing, zeolite, silica fume and mixtures thereof.

53. (Canceled)

54. (Currently Amended) The sialite binary wet cement according to claim [[42]] 38, characterized by that, the regulating agents for regulating setting time and working characteristics of the male body and female body are made of one or more selected from the group consisting of sugars, honeys, citric acid and citrate, tartaric acid and tartrate, strong alkali, dissolvable carbonate, muriate, dissolvable silicate, dissolvable sulfate, water glass, chlorinate, lignosulphonate, boric acid, borate and mixtures thereof.

55. (Canceled)

56. (Canceled)

57. (Currently Amended) The sialite binary wet cement according to claim [[56]] 38, characterized by that, the water content of the female body is from 25% to 70% by weight.

58. (Canceled)

59. (Canceled)

60. (Currently Amended) The sialite binary wet cement according to claim [[59]] 38, characterized by that, the water content of the male body is from 25% to 70% by weight.

61. (Currently Amended) The sialite binary wet cement according to claim [[42]] 38, characterized by that, the amount of the regulating agent is from greater than 0% to 10% by weight based on total dry weight of the male body and female body.

62. (Previously Presented) The sialite binary wet cement according to claim 61, characterized by that, the amount of the regulating agent is from greater than 0% to 5% by weight based on total dry weight of the male body and female body.

63. (Previously Presented) A method for producing the sialite binary wet cement according to claim 38, characterized by that, under the premise of satisfying a required specific surface area, using different combinations of machines suitable to wet-crushing and wet-milling, and using a method called mixing first, then milling in which starting materials of the female body and starting materials of the male body are mixed first in their own proportions respectively and then they are wet-crushed and wet-milled so as to obtain a wet material respectively; and storing and transporting separately the obtained wet materials for the female body and male body.

64. (Previously Presented) A method for producing the sialite binary wet cement according to claim 38, characterized by that, under the premise of satisfying a required specific surface area, using different combinations of machines suitable to wet-crushing and wet-milling, and using a method called milling first, then mixing in which starting materials of the female body and male body are wet-crushed and wet-milled first respectively according to grindability, then mixing and homogenizing the levigated starting material in their own proportions so as to obtain a wet material respectively; and storing and transporting separately the obtained wet materials for the female body and male body.

65. (Previously Presented) A method for using the sialite binary wet cement according to claim 38, characterized by that, mixing the female body and male body of the wet cement together with water and aggregate to produce a concrete.

66. (Previously Presented) The method of using the sialite binary wet cement according to claim 65, characterized by that, the aggregate is obtained from one or more of mountain sand, river sand, sea sand, gobi sand, crushed stone, bulk stone, waste stone, coal gangue, clay, classified sand, whole mine tailings, industrial waste slag and mixtures thereof.

67. (Previously Presented) A method for using the sialite binary wet cement according to claim 38, characterized by that, mixing the female body and male body to cause a hydrating reaction and a chemical reaction between liquid phase and solid phase, thereby forming cementitious materials which is one of crystal gel network or mixtures thereof.

68. (Previously Presented) A method for using the sialite binary wet cement according to claim 38, characterized by that, the cement is used in building, traffic, water conservancy, mine backfill and timbering, subgrade strengthening or underground engineering fields.